REMARKS

Claims 1-3, 5-9 and 36-39 are pending in the present application. Claim 8 has been amended. Claims 40-46 have been withdrawn.

Applicant kindly thanks the Supervisory Examiner, Terrel Morris, for his courtesy in the telephone interview on October 9, 2003.

In the Office Action, the Examiner rejected claims 1, 2, 5-7, 9 and 39 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner contends that the limitation stating "wherein said alkali-resistant thermoplastic material is selected from the group consisting of polyolefins and olefin copolymers" is new matter because there is no support for such amendment in the specification. This rejection was discussed in the interview and Applicant identified sections of the specification which support the amendment at issue. Specifically, support for the above language can be found in the specification on page 12, lines 12 – 22, which states, "[c]ore sliver 23' may comprise any suitable thermoplastic material including, without limitation, either isotactic or syndiotactic polypropylene, ethylene-propylene copolymers or other olefinic fibers, . . . although polyolefins are preferred because of the physical durability and alkali resistance" and "[s]heath 24' is preferably fabricated from thermoplastic fibrous materials the same as or similar to core sliver 23'." Further, support for "olefin copolymers" can be found in the specification on page 12, lines 13 – 18, which states, "[p]referred sheath materials for sheath 24 (or later-described sheath 24') include, without limitation, polypropylene and polyethylene, copolymers of polybutylene and propylene . . .". Examiner Morris agreed that the specification supports the prior amendment to claim 1. Therefore, this ground of rejection should be withdrawn and claims 1, 2, 5-7 and 39 should be allowed.

The Office Action further rejected claims 8 and 36-38 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,054,205 to Newman et al. in view of U.S. Patent No. 6,171,984 to Paulson et al. This rejection was also discussed during the interview. Examiner Morris indicated that it is the final product that must be considered for patentability and that thus

the limitation of the fibrous thermoplastic material being initially fibrous and fused or sintered to merge it into a substantially continuous mass which substantially encapsulates the fiber strands does not patentably distinguish over the cited references. Examiner Morris suggested that the specification be amended to give a more detailed description of the drawings, which in turn would allow the claims to be defined in a way to avoid the prior art.

Applicant has amended claim 8 to recite a "reinforced cementitious board comprising a cementitious board and a reinforcement embedded in said board, said reinforcement including an open mesh of intersecting transverse and longitudinal high modulus of elasticity fiber strands covered by alkali-resistant material . . . wherein at least a portion of the fibrous thermoplastic material is merged into a substantially continuous mass . . . which bonds together the transverse and longitudinal strands at areas of intersection, and wherein at least a portion of said thermoplastic material comprises one or more of polypropylene, polyethylene, copolymers of polybutylene and propylene, ethylene-propylene copolymers or other olefins, nylon, polyester, ethylene propylene rubber, thermoplastic polyolefin rubber, and ethylene-propylene diene monomer."

Newman et al. disclose a glass fiber facing sheet for cement boards which reduces the pitting associated with open mesh glass scrims. The facing sheet includes an open mesh glass scrim and a melt blown polymer web, which is mechanically integrated into a surface portion of the cement board. The scrim is formed by a plurality of intersecting glass yarns which are bonded at their cross-over points with a polymeric binder. The polymeric binder, or coating, of Newman et al. may include polyvinyl chloride, polyvinyl acetate, polyvinylidene chloride, polyvinyl alcohol, styrene butadiene rubber, urethane, silicone, metallic resinates, wax, asphalt, acrylic resins, styrene acrylate copolymers, aromatic isocyanates and diisocyanates, organohydrogenpolysiloxenes, thermoset resins such as epoxies and phenolics, or mixtures thereof. Newman et al. do not teach or suggest a cementitious board including a reinforcement having an open mesh of intersecting strands covered by a thermoplastic material, wherein at least a portion of said thermoplastic material comprises one or more of polypropylene, polyethylene, copolymers of polybutylene and propylene, ethylene-propylene copolymers or other olefins,

nylon, polyester, ethylene propylene rubber, thermoplastic polyolefin rubber, and ethylene-propylene diene monomer.

Paulson et al. disclose a geosynthetic material for earth reinforcement including a first and second plurality of parallel strands which intersect each other. The strands may be comprised of a combination of polymeric and inorganic fibers, and either may form a core material surrounded by the other. A bonding agent may be applied to adhere predetermined regions of the selected weft fibers with selected warp fibers. The reinforcement is employed for reinforcing soil materials, such as inorganic mineral soils, organic materials, metallic waste materials and fossil fuel waste materials. Paulson et al. do not teach or suggest a reinforced cementitious board comprising a cementitious board and a reinforcement embedded in said board.

Further, there is no suggestion or motivation to combine the references to arrive at applicants' amended claim 8. Paulson et al. involves reinforcement for soil applications which is designed to prevent strain and/or creep, ultraviolet radiation sensitivity, weight per unit area, and/or biological/chemical sensitivity common to some polymerically based geosynthetic grids. Newman et al. involves a completely different application for an open mesh glass scrim. Newman et al. disclose use of an open mesh glass scrim on the surface of a cement board to reduce pitting or the formation of indentations, which is caused by relatively large size mesh openings in the glass grid, and which adversely affects the aesthetic appearance and surface properties of the cement board. One faced with the pitting problem in Newman et al. would not look to Paulson et al. to solve the problem, and likewise, one faced with the soil application problems of Paulson et al. would not look to Newman et al. to solve such problems. Therefore, claim 8 should be allowable over these references. As claims 36 – 38 depend from claim 8, they should be allowable for the same reason.

The Office Action further rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Newman et al. in view of Paulson et al. and further in view of U.S. Patent No. 4,967,548 to Fangeat et al. or U.S. Patent No. 6,335,087 to Hourahane. However, both Fangeat et al. and Hourahane fail to correct the deficiencies of Newman et al. or Paulson et al. with

respect to teaching a reinforced cementitious board having a cementitious board and a reinforcement embedded in said board, said reinforcement including an open mesh of intersecting transverse and longitudinal high modulus of elasticity fiber strands covered by alkali-resistant material . . . wherein at least a portion of the fibrous thermoplastic material is merged into a substantially continuous mass . . . which bonds together the transverse and longitudinal strands at areas of intersection, and wherein at least a portion of said thermoplastic material comprises one or more of polypropylene, polyethylene, copolymers of polybutylene and propylene, ethylene-propylene copolymers or other olefins, nylon, polyester, ethylene propylene rubber, thermoplastic polyolefin rubber, and ethylene-propylene diene monomer.

Fangeat et al. relates to textile yarns and discloses a fire-resistant yarn for making fire-resistant materials, such as clothing. The yarn comprises an inorganic filament core surrounded by fibers formed at least in part from aramid resin. In addition to failing to teach or suggest the limitations of claim 8 recited in the preceding paragraph, this reference is inapposite to the problems addressed by Newman et el. and Paulson et al. and thus does not and can not provide the suggestion to combine any of these references to arrive at Applicant's claim 8.

Hourahane discloses a yarn used in cement matrices which includes a core and a multitude of staple fibers forming a layer which envelopes the core. The staple fibers serve the purpose of providing a means for the cement matrix to grip the core strands, which is difficult without the presence of the staple fibers due to the hydrophobic nature of the polymer fibers making up the core strands. In addition to failing to teach or suggest the limitations of claim 8 recited above, this reference is also inapposite to the problems addressed by Newman et el. and Paulson et al. and thus does not and can not provide the suggestion to combine any of these references to arrive at Applicants' claim 8. Therefore, as claim 9 depends from claim 8, claim 9 should be allowable over this combination of references.

In view of the foregoing remarks and amendments, Applicants submit that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account **04-1769**.

Respectfully submitted,

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